

IN THE CLAIMS:

The following claim listing replaces all prior versions:

1-4. (Canceled)

1 ~~8.~~ (Previously presented) An isolated nucleic acid comprising a nucleotide sequence encoding a mutated human alpha synuclein protein having a mutation at position 209 wherein a guanine is replaced by an adenine.

2 ~~6.~~ (Presently amended) An isolated nucleic acid comprising the sequence given in SEQ ID NO. 1.

7-9. (Cancelled)

3 ~~10.~~ (Previously presented) A vector comprising the isolated nucleic acid of claim ~~8.~~¹

4 ~~11.~~ (Previously presented) An isolated host cell comprising the vector of claim ~~10.~~³

12-74. (Cancelled)

5 ~~75.~~ (Previously presented) A method of detecting subjects at increased risk for Parkinson's Disease, comprising:
obtaining a sample comprising nucleic acids from the subjects; and
detecting in the nucleic acids the presence of the nucleic acid of claim ~~8.~~¹,
thereby identifying subjects at increased risk for Parkinson's Disease.

6 ~~76.~~ (Previously presented) A method of detecting subjects at increased risk for Parkinson's Disease, comprising:
obtaining a sample comprising nucleic acids from the subjects; and

detecting in the nucleic acids the presence of the nucleic acid of claim ²~~1~~,
thereby identifying subjects at increased risk for Parkinson's Disease.